Appl. No. 10/614,599

Amendment dated November 13, 2006

Reply to Office Action of August 1, 2006

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-18. (Cancelled)

19. (Currently amended) A method for determining the presence or absence of the nucleic acid molecule of claim 5, encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:3 or encoding a polypeptide having at least 90% sequence identity to the amino acid sequence of SEQ ID NO: 6 in a sample comprising epithelial airway cells or cancer cells selected from the group consisting of pancreas, liver, colon, stomach, thyroid, kidney, or bladder cancer cells, the method comprising:

(a) — providing said sample;

(b) introducing said sample to a probe that binds to said nucleic acid molecule; and

(e) (a) determining the presence or amount of said probe bound to said nucleic acid molecule, thereby determining the presence or amount of the nucleic acid molecule in said sample, wherein enhanced expression of the nucleic acid molecule is indicative of cancer or inflammation.

20-37. (Cancelled)

38. (Original) A method for determining the presence of or predisposition to a disease inflammation or cancer associated with altered levels of a FCTRX nucleic acid molecule encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:3 or a nucleic acid encoding a polypeptide having at least 90% sequence identity to the amino acid sequence of SEQ ID NO: 6 in a first mammalian subject, the method comprising:

(a) measuring the amount of the nucleic acid in a sample from the first mammalian subject; and

5

Appl. No. 10/614,599

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Amendment dated November 13, 2006

Reply to Office Action of August 1, 2006

(b) comparing the amount of said nucleic acid in the sample of step (a) to the amount of the nucleic acid present in a control sample from a second mammalian subject known not to have or not be predisposed to, the disease inflammation or cancer; wherein an alteration in the level of the nucleic acid in the first subject as compared to the control

sample indicates the presence of or predisposition to the disease inflammation or cancer.

39-41. (Cancelled)

42. (New) The method of claim 19, wherein determining the amount of the nucleic acid molecule comprises contacting the sample with a probe that binds to the nucleic acid molecule, wherein the probe has at least 20 nucleotides.

43. (New) The method of claim 42, wherein the probe has a Tm of at least 65°C or greater for a target nucleic acid.

44. (New) The method of claim 42, wherein the probe comprises the nucleic acid sequence of SEQ ID NO:8.

45. (New) The method of claim 19, wherein detecting the amount of the nucleic acid molecule comprises contacting the samples with a forward primer, a reverse primer, and utilizing PCR.

46. (New) The method of claim 45, wherein the forward primer and reverse primer each comprise at least 20 nucleotides and each have a Tm to a target nucleic acid of about 58°C to 60°C.

47. (New) The method of claim 45, wherein the forward primer comprises the nucleic acid sequence of SEQ ID NO:7, and the reverse primer comprises the nucleic acid sequence of SEQ ID NO:9.

6

Appl. No. 10/614,599

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Amendment dated November 13, 2006

Reply to Office Action of August 1, 2006

48. (New) The method of claim 45, further comprising detecting an amplification product with a probe, wherein the probe comprises the nucleic acid sequence of SEQ ID NO:8.

- 49. (New) The method of claim 19, wherein the sample comprises small airway epithelial cells and/or bronchial epithelial cells.
- 50. (New) The method of claim 19, wherein the sample comprises a cancer cell selected from the group consisting of pancreas, liver, colon, stomach, thyroid, kidney, and bladder cancer cell.
- 51. (New) The method of claim 38, wherein determining the amount of the nucleic acid molecule comprises contacting the sample with a probe that binds to the nucleic acid molecule, wherein the probe has at least 20 nucleotides.
- 52. (New) The method of claim 51, wherein the probe has a Tm of at least 65°C or greater for binding to a target nucleic acid.
- 53. (New) The method of claim 51, wherein the probe comprises the nucleic acid sequence of SEQ ID NO:8.
- 54. (New) The method of claim 38, wherein detecting the amount of the nucleic acid molecule comprises contacting the samples with a forward primer, a reverse primer, and utilizing PCR.
- 55. (New) The method of claim 54, wherein the forward primer and reverse primer each comprise at least 20 nucleotides and each have a Tm to a target nucleic acid of about 58°C to 60°C.

- 56. (New) The method of claim 54, wherein the forward primer comprises the nucleic acid sequence of SEQ ID NO:7, and the reverse primer comprises the nucleic acid sequence of SEQ ID NO:9.
- 57. (New) The method of claim 54, further comprising detecting an amplification product with a probe, wherein the probe comprises the nucleic acid sequence of SEQ ID NO:8.
- 58. (New) The method of claim 38, wherein the sample comprises small airway epithelial cells and/or bronchial epithelial cells.
- 59. (New) The method of claim 38, wherein the inflammation or cancer associated with altered levels of the nucleic acid are diseases or disorders associated with cell hyperproliferation and/or loss of control of cell proliferation.
- 60. (New) The method of claim 59, wherein the disease is cancer selected from the group consisting of pancreas, liver, colon, stomach, thyroid, kidney, or bladder cancer.
- 61. (New) A method for determining the presence of cancer in a subject comprising:

 measuring the level of expression of a polynucleotide of SEQ ID NO: 5 or a nucleic acid encoding a polypeptide comprising the amino acid sequence of SEQ ID NO: 6 in a tissue sample from the subject;

comparing the level of expression of the nucleic acid in the tissue sample from the subject to a level of expression of the nucleic acid in a control tissue sample,

wherein an elevated level of expression of the nucleic acid in the tissue sample from the subject indicates the presence of cancer;

wherein the cancer is of the pancreas, liver, colon, stomach, thyroid, kidney, or bladder.

- 62. (New) The method of claim 61, wherein the cancer is pancreatic cancer.
- 63. (New) The method of claim 61, wherein the cancer is liver cancer.

- 64. (New) The method of claim 61, wherein the cancer is colon cancer.
- 65. (New) The method of claim 61, wherein the cancer is stomach cancer.
- 66. (New) The method of claim 61, wherein the cancer is thyroid cancer.
- 67. (New) The method of claim 61, wherein the cancer is kidney cancer.
- 68. (New) The method of claim 61, wherein the cancer is bladder cancer.
- 69. (New) The method of claim 61, wherein measuring the amount of the nucleic acid molecule comprises contacting the sample with a probe that binds to the nucleic acid molecule, wherein the probe has at least 20 nucleotides.
- 70. (New) The method of claim 69, wherein the probe has a Tm of at least 65°C or greater for binding to a target nucleic acid molecule.
- 71. (New) The method of claim 70, wherein the probe comprises the nucleic acid sequence of SEQ ID NO:8.
- 72. (New) The method of claim 61, wherein measuring the amount of expression of the nucleic acid molecule comprises contacting the samples with a forward primer, a reverse primer, and utilizing PCR.
- 73. (New) The method of claim 69, wherein the forward primer and reverse primer each comprise at least 20 nucleotides and each have a Tm to a target nucleic acid of about 58°C to 60°C.

Appl. No. 10/614,599 Amendment dated November 13, 2006 Reply to Office Action of August 1, 2006

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19

74. (New) The method of claim 73, wherein the forward primer comprises the nucleic acid sequence of SEQ ID NO:7, and the reverse primer comprises the nucleic acid sequence of SEQ ID NO:9.

75. (New) The method of claim 74, further comprising detecting an amplification product with a probe, wherein the probe comprises the nucleic acid sequence of SEQ ID NO:8.